

REMARKS

Applicant respectfully requests reconsideration of the above-identified application in view of the foregoing amendments and following remarks.

I. Status of the Claims

Claims 1, 3, 5, 11-13, 15, 17, 23 and 24 are amended without the introduction of new matter.

Claims 1-26 are pending.

II. Status of the Specification

The title of the invention was objected to as not descriptive. As noted above, the title is amended as IMAGE CAPTURING APPARATUS WITH LIGHT EMISSION CONTROLLING MECHANISM AND METHOD OF CONTROLLING THE IMAGE CAPTURING APPARATUS. Accordingly, the Applicant respectfully requests the withdrawal of the objection to the title.

III. Rejections under 35 U.S.C. §§ 102 and 103

Claims 1, 2, 11, 13, 14, 23 and 25 were rejected under 35 U.S.C. §102(b) as anticipated by Sannoh et al. (US Patent Application Publication No. 2003/0071908, herein "Sannoh"). Further, claims 3-10, 12, 15-22, 24 and 26 were rejected under 35 U.S.C. §103(a) as unpatentable over Sannoh in view of Nozaki et al. (US Patent Application Publication No. 2004/0207743, herein "Nozaki"). The above rejections are respectfully traversed.

Independent claim 1 is directed to an image capturing apparatus and amended to recite, among others, that:

a lighting determination unit configured to determine whether or not it is necessary to emit light by a light emitting unit upon photographing an object, on the basis of a brightness of the object;

an area detection unit configured to cause the light emitting unit to emit light and detect, on the basis of a captured image of the object that receives the light emitted by the light emitting unit, an area occupied by a predetermined shape in the captured image, in a case that said lighting determination unit determines it is necessary to emit light by the light emitting unit[.]

According to amended claim 1, the image capturing apparatus detects an object by extracting the edge of an image of the object and sets an area in a captured image based on the detection result of the object. In this regard, the image capturing apparatus causes a light emitting unit to emit light to illuminate the object (“pre-light emission”) in a case that it is necessary to emit light by the light emitting unit to photograph the object, and detects an area occupied by a predetermined shape in the captured image obtained by the pre-light emission. For example, referring to the non-limiting embodiment shown in FIG. 6, when it is determined that a flash emission is necessary, a pre-light emission is then performed (S304), and image data of an object is captured (S307). Based on the captured image data, a face area of the object is detected (S311).¹ Accordingly, the features of amended claim 1 make possible to detect an object by extracting the edge of an image of the object when a brightness of the object is less than a predetermined value.

Sannoh describes a camera that detects a human face in a photometric area and performs optimum AF, AE and/or WB processing on an image of the human face. Upon photographing

¹ See, for example, the Specification at page 32, line 4, to page 33, line 19.

the human face, an exposure control is performed. Nozaki describes a digital camera that extracts a characteristic portion and position information in an object to be photographed, using a face recognition algorithm. However, neither Sannoh nor Nozaki teaches or suggests the features that perform a pre-light emission when it is determined that it is necessary to emit light by a light emitting unit upon photographing an object, in order to detect an area occupied by a predetermined shape in an image of the object. Therefore, the cited references of Sannoh and Nozaki, either taken individually or in combination, do not render obvious at least the above-noted features recited in amended claim 1.

Claim 2 is patentably distinguishable over the cited references, either taken individually or in combination, at least for the above reasons advanced for amended claim 1 to the extent that claim 2 depends from amended claim 1.

Amended independent claim 3 and claims dependent therefrom are patentably distinguishable over the cited references, either taken individually or in combination, at least for reasons similar to those advanced for amended claim 1 to the extent that amended claim 3 includes the features of “an area detection unit configured to detect, on the basis of a captured image of an object to be photographed based on pre-light emission, an area occupied by a predetermined shape in the captured image of the object, in a case where a brightness of the object is less than a predetermined value.” None of the cited references teaches or suggests at least those features of amended claim 3.

Amended independent claim 11 is patentably distinguishable over the cited references, either taken individually or in combination, at least for reasons similar to those advanced for amended claim 1 to the extent that amended claim 11 includes the features of “an area detection unit configured to detect, on the basis of a captured image of an object to be photographed that

receives light emitted by a light emitting unit, an area occupied by a predetermined shape in the captured image, in a case where a brightness of the object is less than a predetermined value.”

None of the cited references teaches or suggests at least those features of amended claim 11.

Amended independent claims 12 and 15, and claims dependent from amended claim 15, are patentably distinguishable over the cited references, either taken individually or in combination, at least for the above reasons advanced for amended claim 3 to the extent that amended claims 12 and 15 each include features substantially similar to the above-discussed features recited in amended claim 3.

Amended independent claim 13 and claims dependent therefrom are patentably distinguishable over the cited references, either taken individually or in combination, at least for the above reasons advanced for amended claim 1 to the extent that claim 13 includes features substantially similar to the above-discussed features recited in amended claim 1.

Accordingly, the Applicant respectfully requests the withdrawal of the rejections of claims 1-26 based on the cited references.

CONCLUSION

In view of the above amendments, the Applicant believes the pending application is in condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

The Examiner is respectfully requested to contact the undersigned at the telephone number indicated below if the Examiner believes any issue can be resolved through either a Supplemental Response or an Examiner's Amendment.

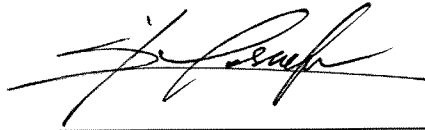
AUTHORIZATION

The Commissioner is hereby authorized to charge any additional fees which may be required for the timely consideration of this Amendment, or credit any overpayment to Deposit Account No. 13-4500, Order No. 1232-5691.

Dated: July 3, 2008

Respectfully submitted,

By



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